


Engineer: Bruce Page	Date: 3/14/06	<div style="text-align: center;">  JPS Communications 5800 Departure Drive, Raleigh, NC 27616 </div>			
Drawn: Bruce Page	Date: 3/14/06				
Approved: Chris Samios	Date: 3/14/06	Title: ACU RADIO APPLICATION NOTES			
Issued/ Revised	Date: 3/14/06	Size: A	Dwg. #: 5961-271309-APP	Rev: A	Sheet: 1 Of 1

APPLIES TO: Kenwood TK-7150 VHF Mobile Radio
Kenwood TK-8150 UHF Mobile Radio

RADIO MODIFICATIONS: None required.

RADIO PROGRAMMING: For radio programming use software KPG-79D and the KPG-46 programming cable. After interface to radio is established the following is required programming for proper interface function. Select **Edit**, **Function Port** then under AUX Input select **AUX Input1 (DB-25 21PIN)**. From the pull down menu select the Function **External PTT**. To allow use of the DSP setting of Squelch Type COR it will be required to select **Edit**, **Function Port** then under AUX Output select **AUX Output3 (DB-25 4Pin)**. From the pull down menu select either **COR** (Carrier Operated Relay) or **TOR** (Tone Operated Relay) depending on intended radio use.

RADIO CONTROLS: The Volume Control will only control the radio's speaker output level and will have no effect on the interface.

CABLING:

Standard ACU-1000 and ACU-T Interface cables are made up of a 2 foot TRP Radio Tray Interface cable and the appropriate 13-foot Extension cable.

ACU-1000 Interface Cable	JPS P/N 5961-291309	(5961-271309 + 5961-261002-00)
ACU-T Cable	JPS P/N 5961-281309	(5961-271309 + 5961-281013-00)
TRP-1000 Shelf Interface Cable	JPS P/N 5961-271309	
RF Connector Type	PL259	

DSP JUMPERS:

JP1	Low Impedance *
JP2	Balanced *

DSP PROGRAMMING:

RX Level	7	-16dBm
TX Level	6*	0dBm*
Squelch Type	COR	
COR Polarity	Active Low	
High Frequency Equalizer	4*	Flat*
RX Audio Delay	2*	100 ms*
TX Audio Delay (Radio Type)	0*	No Delay*
Noise Reduction Value	0*	Off*
VOX/VMR Threshold	1*	Med1*
VOX/VMR Hang Time	3*	775 ms*
COR Inhibit After PTT	1*	100 ms*
All Others	As needed	

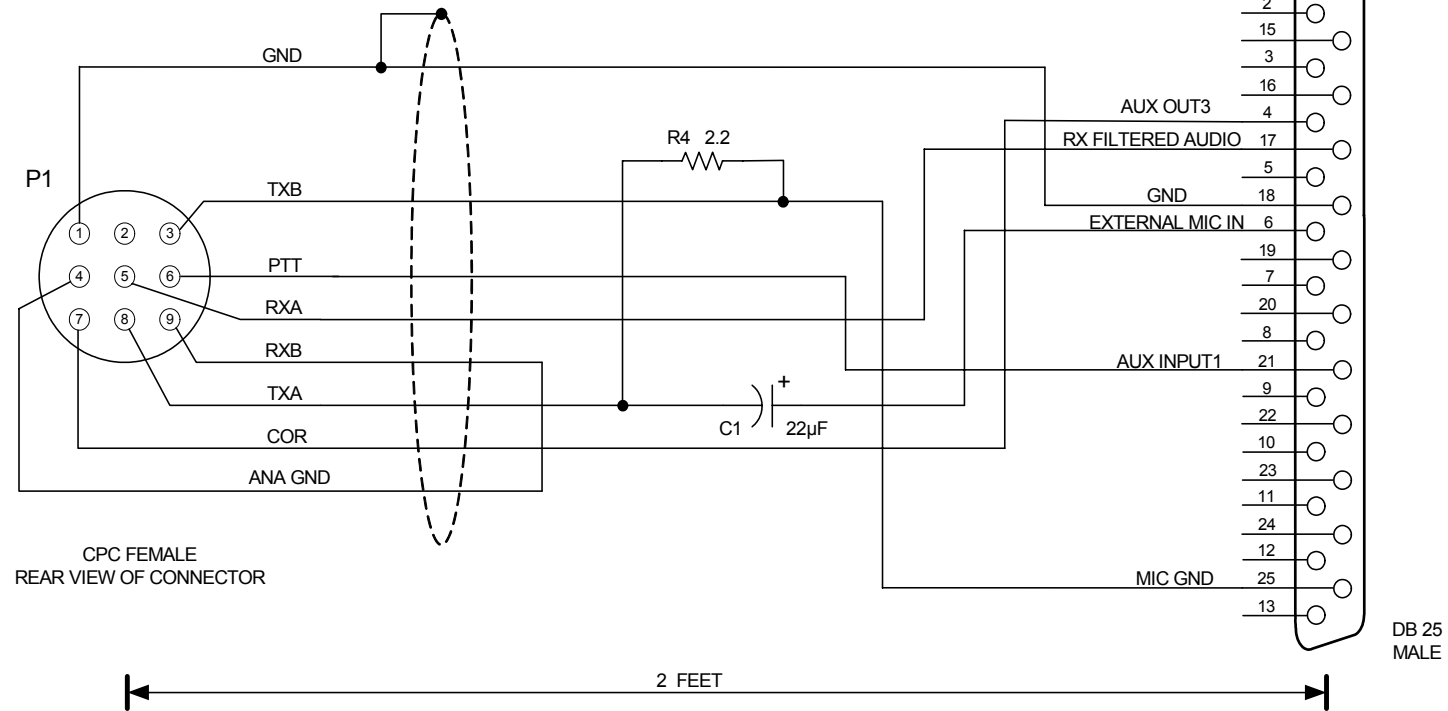
(* Indicates Default Value)

NOTES:

PURCHASED PART

Rev	ECO	Date
A		3-14-06

USE MOLDED CABLE
(JPS P/N 5961-261003-00)



CPC FEMALE
REAR VIEW OF CONNECTOR

COMPONENT PCB
(JPS P/N 5961-271000)

R4 JPS P/N 1820-022000
C1 JPS P/N 0321-220250
JU2
JU4
JU6

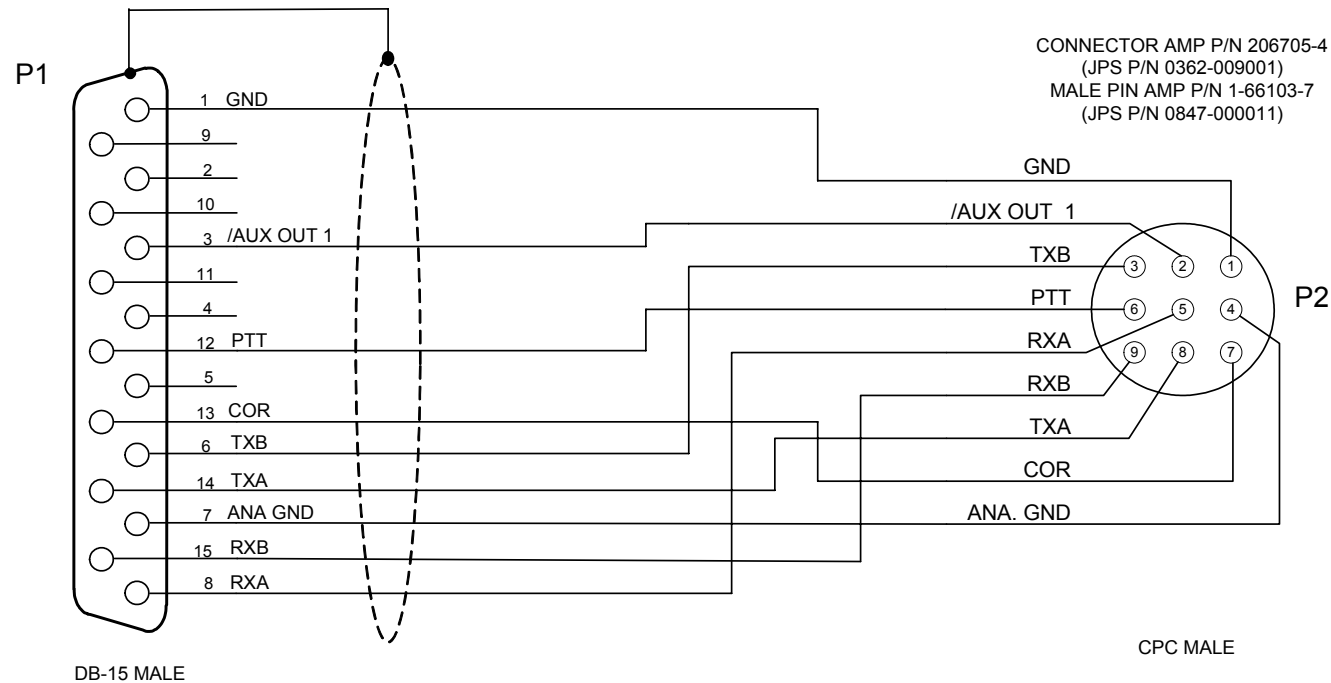
USED WITH:
KENWOOD TK-7150 VHF MOBILE RADIO
KENWOOD TK-8150 UHF MOBILE RADIO

NOTES: SHIELD DRAIN CONNECTED TO PIN 1 OF P1 ONLY.
PIN 21 MUST BE PROGRAMMED FOR EXTERNAL PTT.
PIN 4 MUST BE PROGRAMMED FOR COR OR TOR.

Designed By:	RBP	Raytheon JPS Communications Raleigh, NC USA		
Drawn By:	RBP	Title CABLE, CPC TO KENWOOD TK-7150 / TK-8150		
Checked By:	CTS	Size A	Document Number 5961-271309	Rev A
		Issued Date	APRIL 28, 2005	Sheet 1 of 1

PURCHASED PART

Rev	ECO	Date
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- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO SHELL OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

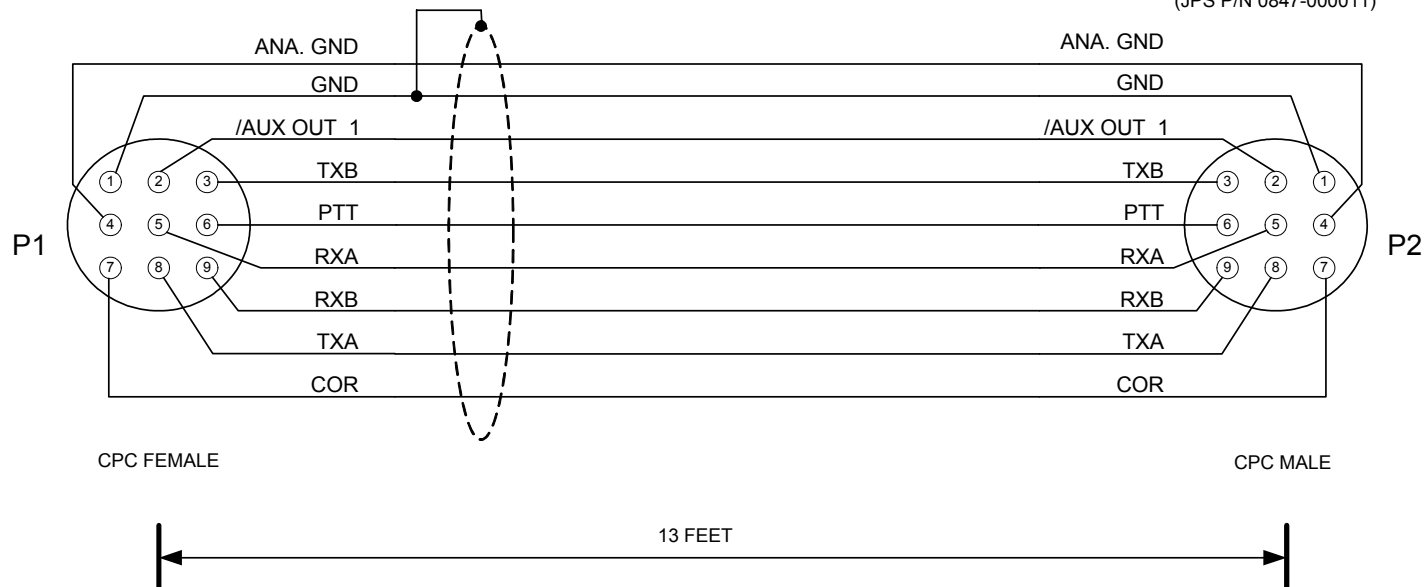
Designed By: JAC	Raytheon JPS Communications		
Drawn By: JAC	Title CABLE, ACU-1000 RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-261002-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	

Rev	ECO	Date
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PURCHASED PART

CONNECTOR AMP P/N 206708-1
(JPS P/N 0362-005003)
FEMALE PIN AMP P/N 1-66105-8
(JPS P/N 0362-005002)

CONNECTOR AMP P/N 206705-4
(JPS P/N 0362-009001)
MALE PIN AMP P/N 1-66103-7
(JPS P/N 0847-000011)



- NOTES: 1) USE BELDEN 9934 SHIELDED CABLE.
2) CONNECT SHIELD DRAIN TO PIN 1 OF P1 ONLY.
3) CONNECTORS P1 AND P2 MUST BE MOLDED TO THE CABLE.
4) CABLE MUST BE LABELED WITH THE RAYTHEON/JPS P/N AND REV, VENDOR CODE AND DATE (MM/YY).

Designed By: JAC	Raytheon JPS Communications Raleigh, NC USA		
Drawn By: JAC	Title CABLE, ACU-T RADIO EXTENSION - 13 FT		
Checked By: RBP	Size A	Document Number 5961-281013-00	Rev A
Issued Date JANUARY 5, 2004		Sheet <u>1</u> of <u>1</u>	